



**DIRECTORATE FOR FINANCIAL, FISCAL AND ENTERPRISE AFFAIRS  
COMMITTEE ON COMPETITION LAW AND POLICY**

**Working Party No. 2 on Competition and Regulation**

**COMPETITION IN THE NATURAL GAS INDUSTRY**

**-- United States --**

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## COMPETITION IN THE NATURAL GAS INDUSTRY

### United States

1. This paper will cover four topics:<sup>1</sup>
  - What is the Federal Energy Regulatory Commission and how does it embody the basic choices the United States has made about how to regulate an industry?
  - How has the regulatory system for natural gas changed over the last few years to meet a radically changing industry?
  - How have these changes worked to date and what changes are expected over the next few years?
  - What are the key competition issues?

#### **What is the Federal Energy Regulatory Commission?**

2. The Federal Energy Regulatory Commission (FERC), as the name implies, is part of a federal system. The reason lies both in history and in the nature of an integrated utility industry. Until the 1930s, regulation of the natural gas industry took place at the State and local level; in the early days, most gas was either manufactured from coal or produced near where it was consumed. But with the growth of large gas production fields in the Southwest United States, large-scale monopoly pipelines began to transport that gas over longer distances. The industry became inherently interstate in nature.<sup>2</sup> Because the power to regulate interstate commerce is reserved to the federal government under the United States Constitution, this presented a jurisdictional problem for State and local authorities that had previously regulated local distribution companies. As a result, State and local regulatory bodies were not able to regulate the prices charged for natural gas in the wholesale transactions between interstate pipeline companies and local distribution companies.

3. The Congress responded to this regulatory gap – between State regulatory goals and State jurisdiction – with the Natural Gas Act of 1938 (NGA). The NGA granted the federal government control over those parts of the industry that involved interstate commerce, but left matters of local concern to the states. For example, natural gas distribution, which involves generally the receipt and delivery of gas to the ultimate consumer within a state, remains under state jurisdiction, while the FERC regulates rates, terms and conditions of service for interstate transportation and sales for resale. The NGA gives the FERC the authority to regulate the rates for transportation (including storage) and sales for resale of natural gas; to authorize the acquisition, construction, and abandonment of facilities; and to authorize the siting of facilities involved with the importation or exportation of natural gas.<sup>3</sup> These activities are automatically authorized under blanket certificates held by the pipelines. The NGA specifically exempts production, gathering, and local distribution from FERC jurisdiction. (But, as will be described below, the United States Supreme Court's 1954 Phillips Petroleum Co. v. Wisconsin decision, led to the regulation of wellhead production and pricing from the late-1950's until the early 1980's.)

4. In the United States the same agency, FERC, regulates several energy industries: natural gas, oil pipelines, electric power and hydroelectric projects. The FERC often implements common policies across

the regulated industries. To some extent, the choice and scope of the federal regulatory authority is a historical accident. Hydroelectric jurisdiction came first with the passage of the Federal Power Act in 1920 which created the Federal Power Commission (the forerunner of the FERC). FERC's hydroelectric regulation principally involves licensing hydroelectric facilities with conditions and balancing environmental and other concerns such as the need for power and dam safety issues.

5. Initially, the FPC did not have authority to engage in economic regulation — for example, to set just and reasonable rates and to police potential abuses of market power. But these and other regulatory responsibilities at the federal level were added over time largely involving issues of regulating companies that may have market power. The FERC also has regulatory responsibility over the construction and siting of interstate natural gas pipeline facilities. As part of this responsibility, the FERC performs environmental analysis associated with pipeline construction proposals. As mandated by the National Environmental Policy Act (NEPA), the Commission considers the environmental impact associated with a project in its decision-making process. When the FERC authorizes pipeline facilities, the pipeline has the authority under the NGA to seek the right to exercise *eminent domain* (e.g., the right to obtain an easement from private landowners through condemnation procedures, in exchange for compensating them for the fair market value of their property). To obtain *eminent domain*, the pipeline which has received FERC authorization to build new facilities must take action in the local district court where the facilities are to be sited. This is unlike oil pipeline and electric utility facility siting responsibilities where the states, not the FERC, authorize the construction of new facilities.

6. Combining natural gas, oil pipelines and electricity regulation in a single agency makes sense because these industries have strong structural similarities - they are all large scale transmission grids. The FERC has been able to learn from its experience with one industry lessons that it can apply to the others. Most recently, the FERC has used its experience with applying competitive market forces to the regulation of natural gas in its changing approach to electric regulation. For example, the FERC required open access to wholesale electric transmission services in 1996, similar in many respects to the voluntary open access transportation program for natural gas pipelines initiated in 1985.

7. Over time, a strong federal regulatory system has evolved. Significant federal economic regulation is one reason the U.S. did not nationalize the utility industries affecting the public interest as many other countries did. Instead, the U.S. chose to regulate a privately-held industry to control the exercise of market power.

8. Through this approach, the U.S. anticipated the basic problem that many other countries now face. Private entities providing necessary public services retain market power, which could allow them to charge captive customers excessive rates and provide service below the level they would have to offer in a competitive market. This would be economically inefficient and unacceptable from a public policy perspective.

### **Why has the U.S. stayed with the Commission model of economic regulation?**

9. A single administrator can almost certainly make decisions and set policy more efficiently than a five-member Commission. Yet the FERC has remained a five-member commission since the creation of its predecessor, the Federal Power Commission, eighty years ago. The great advantage of a commission decision-making process is the balance it brings to significant decisions that affect millions of consumers and billions of dollars. With five members, no more than three of which may be from the same political party, divergent philosophies and views are represented. With independence from the other branches of government, people need not fear that the immediate agenda of any particular administration is controlling decisions. And with a strong tradition of open and due process, all parties can have their fair say. This

concern for fair and open decision-making is so deeply ingrained in American culture that the multi-member Commission model is used in nearly every state as well as at the Federal level.

10. As an independent commission, the FERC has a special relationship with each of the three branches of the federal government. The FERC was created by legislation promulgated by Congress. Each fundamental change in the FERC's regulatory mandate is made by Congress through legislation. The President appoints the five Commissioners and designates the Chairman, but the Senate must approve the nominations. Finally, FERC's actions are subject to judicial review by the federal courts.

11. Independent commissions also exercise some "borrowed" powers from each branch of government. In rulemakings, the FERC acts in a legislative capacity, implementing the laws that Congress passes, interpreting the statutory provisions to meet changing circumstances and protect the public interest. The FERC writes the regulations that provide the details and the set of rules for implementing the legislation. This system of delegation is particularly effective in that it allows the agency, with input from the industry and affected parties, to create workable rules that are consistent with the guiding principles of the Congressional legislation.

12. Many of the FERC's activities are essentially executive, as when it issues licenses and certificates, investigates complaints, or ensures that companies comply with the terms and conditions to which they have agreed. The FERC also fills a quasi-judicial role when it holds administrative hearings in the many cases that come before it. In each of these roles, the FERC brings its technical and legal expertise to bear on the details of important decisions in a way that would be difficult for courts to administer. On occasion, the Commission makes decisions with which other branches of government disagree. Other federal agencies often file comments or objections in FERC's proceedings or, in some cases, appeal the FERC's decisions to the Courts. Most common are comments filed by such agencies as the Department of Interior relating to the environmental review of natural gas or hydropower projects.

13. Commission regulation of the natural gas industry is a process that blends economics, public policy, and politics. The primary goals of the FERC are economic efficiency and fairness. The goal of regulation is to protect customers from the exercise of monopoly power. By law, that is the FERC's core mission. The checks and balances built into the federal system ensure that these goals are achieved.

### **How has the federal regulatory system for natural gas changed in recent years?**

14. One of the most difficult tests of any institution is how it responds when the world around it changes drastically. The FERC has had a chance to respond to such a challenge during the past two decades. The natural gas industry has gone from heavy Federal regulation to a much more light-handed form that works in conjunction with competitive market forces. Historically, the FERC relied on a long-standing method of regulating every aspect of the natural gas industry. Interstate pipelines bought gas from producers at FERC-regulated prices. Pipelines then aggregated all their supplies and sold gas at FERC-regulated rates. Most of the gas went to distributors, who in turn sold it at retail to end-use consumers at state-regulated rates.

15. This system evolved over many years. In some respects it was extremely stable. Almost all contractual commitments in the industry were long term, traditionally twenty years. Pipelines had a contractual obligation to serve their customers, and customers often had no alternatives to pipeline supplies at set prices.

16. In 1954, federal regulation was expanded to include the sale of wellhead natural gas production in interstate commerce, as a result of the Phillips Petroleum Co. v. Wisconsin case.<sup>4</sup> Regulation of

wellhead production prices lead to the development of bifurcated interstate and intrastate markets and created supply-demand imbalances within 15 years. Eventually, the system began to fall apart. FERC was micro-managing gas industry decisions. Regulated prices in the interstate market were much lower than in the largely non-Federal-regulated markets within individual states. A producer in Texas could get a very low price for selling gas to a FERC-regulated pipeline transporting it to out-of-state customers, and another, much higher, unregulated price if the gas were sold to a pipeline delivering the gas to customers in Texas.

17. This market disparity made it very hard for interstate pipelines to contract for enough gas to supply their customers in the 1970s. This led to major shortages in interstate markets, not because there was any lack of gas, but because producers had no financial incentive to sell into the interstate market. Price controls thus led to significant market distortions. The United States has thousands of natural gas producers. Regulating their prices caused price distortion and inefficient markets, and undermined consumer welfare.

18. In response to these events, Congress passed in 1978, the Natural Gas Policy Act (NGPA). The NGPA did many things, but most importantly, it began a process of deregulating all natural gas wellhead prices (the price pipelines paid to producers at the point of production). Some prices remained under controls until the early 1990s when the Natural Gas Wellhead Decontrol Act of 1989 ended all remaining wellhead price controls by January 1, 1993. But the logic of a competitive market for gas as a commodity began in 1978 and was irreversible.

19. At first, the Commission tried to graft a gradually-deregulated commodity market onto the traditional regulatory system, but the dynamics of the situation made this all but impossible. In the 1970's OPEC sent oil prices soaring. The relatively small amount of deregulated gas magnified the problem as these prices also soared. Pipeline companies were eager to sign new supply contracts, but because of the NGPA-imposed price ceilings, producers could not get the full market price for their production. Competing pipelines, unable to bid market prices to purchase wellhead gas supplies, began offering more generous non-price terms to win the competitive battle. The result was purchase contracts with long terms, escalating prices, and high annual purchase requirements. Many pipelines agreed to buy almost all the gas a well could produce — or pay for the gas even if they could not take it. These so-called "take-or-pay clauses" later led to many problems when pipelines faced recovering billions of dollars of liabilities that resulted from renegotiated contracts. Similarly, pipelines might have agreed to pay very high prices once some gas prices were decontrolled, in 1985 or 1987 (as was expected in the period immediately following enactment of the NGPA in 1978).

20. In the short run, this caused only isolated problems. Pipelines still had large quantities of very cheap gas under old contracts which resulted in average sales prices that were still relatively low. But in the early 1980s, conditions changed. Oil prices declined as did market-driven gas prices. By 1983, pipelines began to find that they were committed to buying so much expensive gas that their average price was no longer competitive for customers with the capacity to switch to an alternative fuel. Thus, those customers with dual fuel capability, particularly industrial customers, could use fuel oil when it was less expensive than natural gas.<sup>5</sup> They could not decrease purchases of expensive gas because of take-or-pay clauses signed in the early 1980s. If they reduced purchases of cheaper gas, they would only raise the average price still further.

21. The pipelines' situation became more difficult when the FERC issued its Order No. 380 in 1984, ruling that interstate pipelines could no longer charge their customers for a given amount of gas regardless of how much gas the customer actually took. The so-called minimum bill resembled a take-or-pay clause, except that it was on the customer side of the pipeline. Freed from these minimum purchase or take

obligations, customers could go into the marketplace and switch suppliers, thereby exacerbating the competitive dilemma confronting pipelines with high gas costs.

22. For a time, the industry worked with the FERC and with state commissions to solve the problem by segmenting gas markets; the FERC allowed different sets of customers to be treated differently. Customers who had alternatives received special treatment because they could choose not to purchase natural gas from interstate pipelines. Under these special marketing programs, they were allowed to buy cheaper, market-priced gas and use the pipeline only as a transporter. Other customers without alternatives — so-called captive customers — continued to buy pipeline supply. The idea was to keep the customers with alternatives on the system so that they contributed something toward the fixed costs of the system; it was thought to be better to have the customers with alternatives make a small contribution to the system costs than to leave the system and make no contributions.

23. In 1984, the Courts ruled that this market segregation was improper under federal law because it did not give the same choices to captive customers. The Commission responded to the Courts with Order No. 436. This order set up an open access transportation program to promote competition both at the wellhead (as encouraged by price decontrol) and at the city gate (the point where a pipeline delivers gas to a local distribution company, which is regulated by a State commission). Under Order No. 436, pipelines could choose to become open access transporters of natural gas; i.e., they could transport gas owned by others and charge only for the transportation. This gave all shippers access to market-priced gas and made the pipelines eligible for a variety of regulatory benefits that the Commission offered only to open access pipelines, such as self-implementing services and pre-granted abandonment authority (authority to terminate service automatically without additional Commission approval at the expiration of the contract).

24. Order No. 436 led to what some called the two-straw theory of pipeline services. Under this analysis, the pipeline ran its business in two completely different ways, almost as if there were two pipelines within the single pipeline. Through the first straw, the pipeline served its customers in the traditional way. It bought gas from producers, aggregated the supplies, averaged the costs, and resold the gas to customers at FERC-regulated cost-based rates. The pipeline was responsible if a producer did not deliver gas into the pipeline, so it needed a fairly large gas supply reserve to deal with potential supply/demand imbalances. The gas was guaranteed, but often at higher than spot market prices.

25. Through the second straw, the pipeline moved gas that producers had already sold either directly to customers or through brokers. In this case, the pipeline had no obligation to warrant gas supply — customers and producers were responsible for their own actions. But the gas was competitively priced, which often produced consumer rates lower than gas that could be purchased from the pipeline and sold under traditional regulation.

26. This system was unstable; almost every stakeholder had an incentive to game the system to gain unfair short-run advantages. Nonetheless, it endured for several years. This happened despite FERC efforts to make regulation much more flexible by loosening remaining price controls on gas, offering pre-granted abandonment of certain contracts, and allowing a broader scope of self-implementing transactions.

27. Also during this time, the FERC faced the crucial issue of potential affiliate abuse. Pipeline companies often set up affiliated companies — so-called marketers and brokers — to buy and sell market-priced gas. These pipeline marketing affiliates used the second straw in the pipeline — that is, they were offering customers competitively-priced gas separate from the pipeline's system supply. The problem for the FERC was how to ensure that the pipeline would not use its monopoly control over the physical pipeline system to favor its affiliated marketer over non-affiliates.

28. The FERC responded in 1988 with Order No. 497. This Order established a code of conduct for pipelines and set up reporting requirements to prevent potential preferential treatment by a pipeline for its affiliated marketer. For example, a pipeline could not offer a discount to its affiliated marketer unless it offered the same discount to other similarly-situated shippers that needed to use the pipeline's transportation capacity. The order also required the pipelines to report on affiliate transactions so that the FERC and others could monitor their actions and make sure there was no preferential treatment given to a pipeline's affiliates.

29. The whole issue of affiliate relationships and the potential abuses they spawn has been contentious ever since it first arose. Reasonable people have held very different views on how widespread potential affiliate abuse might be. The measures adopted by the FERC were intended to be a reasonable balancing of interests; and they seemed far preferable to requiring pipeline divestiture or divorcement of their marketing affiliates.

30. In the early 1990s, the Commission came to realize that the two-straw approach to pipeline services was inefficient and could not survive. Customers could, and often did, game the system. For instance, they would keep firm rights to pipeline gas, but buy spot gas most of the time and have the pipeline transport it on an interruptible tariff that only recovered a portion of the pipeline's cost of providing service. This meant the pipeline had to stand ready to meet its full service obligation to its customers, but might be called on to do so only a few days a year.

31. On the other side, the pipelines had economic incentives to make it hard for transportation-only customers to use its system. The system was far from user-friendly. The more a pipeline could force customers to keep firm and secure pipeline sales service to meet their retail service obligations, the more the pipeline could collect both transportation capacity reservation charges and interruptible rates. This offered some compensation for having to maintain large gas portfolios, but only at the expense of making the whole system artificially hard to use. In other words, the system encouraged both sides to poison the well, partly in economic self-protection, and partly to meet government-imposed service obligations. Simply put, the resulting system was inefficient and costly for everyone.

32. In 1992, the Commission issued Order No. 636 to deal with the full range of problems the system was creating. Under Order No. 636, the pipeline became a single straw again. The pipelines were required to unbundle, or split, their existing services into separate services: gas sales and transportation from the wellhead to the city-gate became separate services. Within transportation services, pipelines had to further unbundle different types of services, such as storage, so that customers would pay only for the services they needed.

33. To the extent that a pipeline still desires to sell gas, it can do so at market prices just as unregulated companies do. But it must offer exactly the same quality of transportation service to everyone, regardless of whether the customer buys the pipeline's gas or someone else's. On the other hand, the pipeline no longer has an obligation to supply customers with gas. Guaranteeing supply is a customer responsibility and can be achieved through portfolio management, dealing with brokers, marketers, the pipeline, or through purchasing cooperatives.

34. Order No. 636 also included important new market mechanisms. Under the capacity release program, companies can resell their firm capacity rights to others. With capacity release has come electronic bulletin boards (EBBs) on which customers and pipelines can conduct business much more quickly than before. In the post-Order No. 636 world, market centers, explicitly contemplated in Order No. 636, have begun to flourish around the country. They allow customers to switch gas among pipelines easily. Combined with capacity release, they make the system much more flexible.

35. Order No. 636 also changed the way pipeline rates are designed. For firm capacity, all fixed costs now go into a reservation (or demand) charge. A reservation charge is a monthly charge for service that is paid regardless of the level of service tendered during the month. Having the majority of the costs in a monthly charge lowers usage charges and evens the competitive playing field among all gas suppliers.

#### **How has Order No. 636 worked so far?**

36. Not long after the implementation of Order No. 636, the United States faced very severe winter weather in most of its major gas markets at the same time. This was a severe test of the new system. The system passed the test. There were fewer service disruptions than in many past emergencies, and less disruption than in the electric industry, where traditional regulation — at least for the time being — still had a stronger hold.

37. Two major reasons for this success are the vastly improved industry communications network and the much greater service flexibility that Order No. 636 allowed. With electronic bulletin boards (EBBs) and more recently, Internet web sites, real-time communication and trading has become widespread. Industry players are far better able to recognize rapidly-changing events than ever before. The new market mechanisms in Order No. 636 give market players ways to respond quickly to changing market conditions with very little intervention from regulators.

38. The combination of wellhead decontrol, open access transportation, and the unbundling of pipeline gas sales from pipeline transportation has created opportunities for the gas commodity market as well as the transportation market to become more efficient and competitive. The subsequent efforts of state regulators to allow unbundling of transportation and gas sales on the retail level supplemented the FERC's actions.<sup>6</sup> As a result, overall gas prices to consumers decreased as more efficient and competitive markets have developed. LDCs began to contract for gas supplies in the production area and separately for transportation service from pipelines. Large industrial consumers began to do the same, contracting for interstate pipeline capacity and transportation service on LDCs. Market centers began to develop to facilitate the buying and selling of natural gas. Marketers and shippers began to use the capacity release mechanism as an alternative to pipeline transportation service, particularly for short-term service.

39. Today's market is dramatically different from the market of 1993. Upstream and downstream wholesale markets are maturing and the number of market centers and gas trading points is growing, providing shippers with greater gas and transportation choices. The financial marketplace has developed a variety of options and futures contracts that help participants hedge against price risk. With the rapid growth of electronic commerce has come greater liquidity in commodity markets and the prospect of such liquidity for the transportation market as well. Because the commodity and transportation markets have become so interdependent, changes in one market affect the other. The dynamic growth of the wholesale marketplace has created both challenges and opportunities for FERC regulatory policy.

#### **What further changes lie ahead?**

40. The U.S. now has the most stable regulatory structure since the first Arab oil embargo more than 25 years ago. At the same time, the gas industry today is very different from that of the 1970s. Today, companies must be able to respond flexibly and quickly to many different customer needs. In addition, there is a national interest in ensuring that natural gas can compete on even terms with any other fuel in these and other markets. Gas is a cleaner-burning fuel than either coal or oil. Increased use of natural gas will assist in improving air quality, and reduce the generation of greenhouse gases. As the industry finds



ways to serve these markets, the Commission must ensure that its regulations are flexible enough to meet the needs of the changing market without creating artificial market distortions.

41. Along the same lines, the Commission is exploring ways to make decisions more quickly in order to give parties more certainty in this increasingly fast-paced market. The Commission's experience shows that one method that has proved useful in some cases is the utilization of industry collaborative groups. When producers, pipelines, and customers come together, they can often reach decisions quicker and more sensibly than would be possible under a traditional regulatory approach. A prime example is the Gas Industry Standards Board (GISB). GISB is a group comprised of representatives from various segments of the natural gas industry that has worked to standardize business practices (for example, standards relating to nominations, flowing gas, invoicing, and contracts) to make it easier for everyone to do business.

42. There is a recognition that workably competitive markets teamed with light-handed regulation create a more effective combination for today's industry than the traditional command-and-control regulatory methods. While FERC regulation has become more light-handed, it is of no less importance. Today's markets, while often workably competitive, are not fully competitive. Light-handed regulation in some ways presents regulators with more challenges than traditional regulation because the market is constantly changing as are the players and the services. Monopoly power in transmission services remains in most regions, although this power has been weakened in many areas by competition from released firm capacity. The FERC must continue to protect the public interest by monitoring market power and mitigating resulting abuses of market power.

43. As a result of all the changes to the natural gas market, the Commission finds that it must focus less on individual companies and more on markets and market-related issues. In addition, rapidly evolving energy markets require ongoing examination and support. The Commission must increasingly consider the competitiveness of energy markets in almost every action it takes. In this new environment, the Commission can no longer rely on the traditional methods of gathering information. For these reasons, the Commission is continuing to reexamine its current regulatory framework so that it can better meet the challenges posed by the growing competitive market.

44. The FERC's most recent regulatory actions are intended to further extend the reach of competitive market forces into the increasingly competitive natural gas market. In Order No. 637, approved by the FERC on February 9, 2000, the Commission removed price caps for short-term, one-year or less, capacity release transactions. The Commission also adopted a new policy to allow pipelines to implement peak/off peak rate designs, and term-differentiated rate designs. Additional reforms will: further equalize rules and operating procedures that apply to capacity release and to capacity purchased directly from the pipeline; reform pipeline penalty structures; and clarify the operation of right-of-first-refusal rights of long-term firm maximum rate pipeline customers. Another of Order No. 637's initiatives improves market transparency and market monitoring by adopting improvements to reporting of information on new transactions, available capacity, and affiliations between buyers and sellers of capacity. This rule did not adopt proposed mandatory auctions, but continues existing capacity release posting and bidding rules.

45. As the natural gas industry has evolved into a dynamic, more competitive market, the FERC now focuses on ensuring just and reasonable transportation and storage rates terms and conditions of service offered by interstate pipelines, as well as on authorizing the construction, acquisition, and abandonment of interstate gas pipeline facilities, when it determines that such actions are required by or consistent with the public interest. The purchase and sale of natural gas as a commodity is now governed by the marketplace, not the FERC. In the process, the FERC has worked hard to achieve four different values in its regulatory approach — flexibility, efficiency, competition, and fairness. Often these goals have pulled in the same direction, but often they have required balancing. As a result, the Commission has continued to transform

the way it regulates the natural gas system so that it works better and far more efficiently without losing sight of the need for basic equity through the whole process.

### **What are the key competition issues?**

#### ***Application of Competition Law***

46. As noted above, the Natural Gas Wellhead Decontrol Act of 1989 ended 35 years of regulation of the pricing of natural gas supplies, establishing competition over regulatory control as the best mechanism for pricing natural gas. FERC's Order No. 636 in 1992 required all open access pipelines to unbundle all contracts for sales of gas from transportation service. FERC retains the power to establish rates for the interstate transmission of gas from transportation service. However, FERC has issued blanket authorization to any willing party to make interstate sales of natural gas at market-based prices, terms and conditions of service. This evolving regulatory environment has resulted in a natural gas industry in which gas pipelines operate in both competitive (gas sales) and monopolistic (gas transportation) markets, although sales and transportation operations must be operated separately.

47. FERC has no regulatory authority over acquisition of voting securities of natural gas companies. Pursuant to Section 7 (c) of the Natural Gas Act ("NGA") which prohibits the operation of acquired assets without a certificate of public convenience and necessity, FERC regulates asset acquisitions and changes in facilities and services. The courts have held that FERC must consider antitrust policies when it applies the NGA's public interest requirements. The Supreme Court has concluded that the authority granted in Section 7(c) does not deprive the federal courts of jurisdiction to enforce the antitrust laws with respect to the natural gas industry.<sup>7</sup> Accordingly, the Department of Justice, the FTC, and private parties may challenge FERC-approved acquisitions under the antitrust laws.<sup>8</sup>

#### ***Federal Antitrust Enforcement***

48. One key issue to understanding federal antitrust enforcement is that the courts recognize antitrust enforcement as an important adjunct to regulation by the FERC and by state and local regulatory agencies. Even though natural gas markets are regulated, competition can exert an important influence on the conduct of buyers and sellers and on market performance. Thus, any antitrust enforcement action must pertain to conduct that lies outside of regulatory oversight and is therefore subject to the discretion of buyers and sellers. As deregulation has advanced with respect to natural gas, the scope for antitrust enforcement has naturally advanced as well.

#### ***Merger enforcement***

49. Some areas of the natural gas industry pose relatively little competitive concern. For example, ownership of natural gas reserves is relatively unconcentrated. The Commission in 1996 changed the Hart-Scott-Rodino premerger filing rules to create an exception to the notification requirements for acquisitions of natural gas reserves that do not exceed \$500 million on the basis that such acquisitions are unlikely to violate the antitrust laws.<sup>9</sup>

50. In recent years, there has been a consolidation in many energy-related industries, including natural gas. The FTC has brought merger enforcement cases in the areas of transportation of gas by pipeline, gas gathering, and processing of natural gas products. Competition issues also have arisen in mergers between an incumbent electric utility and natural gas facility of some type (so-called "convergence" mergers).

51. In defining the relevant product and geographic markets in its merger cases, the antitrust agencies follow the analytical approach set forth in Sections 1.1 and 1.2 the Department of Justice and Federal Trade Commission's Horizontal Merger Guidelines.<sup>10</sup> The production and sale of natural gas has been found to be relatively unconcentrated markets in most instances and, for that reason, mergers of gas suppliers have not required more detailed antitrust scrutiny.

52. Natural gas may be treated as a separate product market or it may be only one component of a broader product market containing other forms of energy, such as electricity or steam. Either approach can be valid, depending upon whether other forms of energy exert a significant competitive constraint upon natural gas. In practice, whether natural gas constitutes a relevant product market depends upon the relative prices of fuels in the region, the stage of production in which the merger is taking place, costs of switching between fuels, the customer class under consideration, and the ability to price discriminate between customer classes. For example, the Commission has often found that residential customers do not readily substitute between natural gas and other forms of energy. In contrast - and to an increasing degree in recent years - large commercial or industrial customers do switch readily between natural gas and other forms of energy in some areas of the country. This is one factor motivating the Commission's interest in convergence mergers involving natural gas and electricity suppliers. As distributed generation innovations are commercialized, competition between natural gas and electric power suppliers is likely to expand to include additional groups of customers.

### *1. Transmission*

53. Competition in the transmission of natural gas products is a significant concern given relatively high market concentration and high entry barriers in this sector. A recent example is the Commission's case challenging Questar Corporation's attempt to purchase a 50% interest in the Kern River Gas Transmission Company ("Kern").<sup>11</sup> Questar was an integrated energy company, active in natural gas production, interstate pipeline transmission, and local gas distribution. It owned the only pipeline serving large industrial customers in the Salt Lake City, Utah area who generally bypassed the local utility and purchased gas directly from other sources. Those customers used Questar's pipeline services to transport the gas either directly to their facilities or to the local utility, from which they purchased local transportation service. Questar sought to acquire from Tenneco, Inc. a 50% stake in Kern, which operated another interstate pipeline running through the area and was planning to build a connecting pipeline to serve industrial customers in competition with Questar. The evidence showed that before any construction commenced, Kern River's solicitation of customers was already affecting the market because Questar, in response, was lowering its prices to certain customers. Questar's reaction, according to the Commission complaint, was to buy a major piece of the prospective competitor that was threatening, if not already eroding, its monopoly position.

54. The parties proposed consenting to an order that would limit Questar's ability to exploit Kern River but would not have dealt with Questar's incentives to bid less aggressively because of its 50% stake in Kern River. The Commission rejected this proposed remedy and challenged the transaction in federal court, alleging that the acquisition would re-establish a monopoly over transmission of natural gas in the Salt Lake city area by giving Questar substantial control over a significant new competitor. Upon the Commission's filing of the injunction action, the parties abandoned the transaction.<sup>12</sup>

### *2. Gas Gathering*

55. Gas gathering is the pipeline transportation of natural gas between a well and a transmission pipeline or gas processing plant. As in transmission cases, the Commission's main concern is that gas gathering facilities will create a bottleneck in some geographic areas and producers will be forced to pay monopoly prices to have their gas moved from the wellhead. This concern increased in importance with the deregulation of wellhead pricing because the benefits of competition could be defeated if the market for transporting gas from the wellhead is not competitive. The geographic market in these cases is defined by the need for proximity of gathering systems to the wellhead; the greater the distance, the greater the cost. A market-by-market analysis is required. Concentration can vary, but can be very high, with few choices for producers and limited potential for entry. Although new entry can be rapid, it may not occur depending on the amount of sunk costs and expected profitability given the flow volumes of producing wells in the area. The least problematic markets are likely those in which producers have some protection from price increases, either because there are several competing companies offering gathering services in the area or because they have long term contracts with gatherers. In addition, the geographic market may be expanded if the size of the reserves in the area would allow competing gatherers to expand profitably if a dominant incumbent attempted to increase prices.

56. In 1998, the Commission challenged the acquisition by a subsidiary of Shell Oil Company of gas gathering assets located in three States, that were owned by subsidiaries of The Coastal Corporation.<sup>13</sup> The Commission alleged that the acquisition would have decreased competition in parts of two States where Shell was the largest gatherer and Coastal was a substantial competitor. In many of those areas, Shell and Coastal were the only gatherers or two of only three. The consent order settling the Commission's charges required the divestiture of 171 miles of pipeline and related assets and prohibited Shell from acquiring, within the identified markets, more than five miles of gathering pipe during any eighteen month period for ten years.

### 3. Processing

57. Concern over decreased competition in the processing of natural gas products was the focus of the Commission's NGC/Chevron case in 1996.<sup>14</sup> In that case, NGC sought to purchase assets from a subsidiary of Chevron that included a fractionation plant in Mont Belvieu, Texas, which separates raw natural gas liquids into specification products (methane, propane, butane). The Commission alleged that producers of raw mix natural gas liquids throughout much of Texas, New Mexico, western Wyoming and western Colorado had no practical alternative to Mont Belvieu. The Commission's complaint also alleged that Mont Belvieu was a highly concentrated market into which new entry was unlikely. NGC and Chevron were direct competitors in the fractionation of raw mix natural gas liquid in Mont Belvieu. According to the FTC complaint, the transaction would have eliminated this competition and increased the likelihood that NGC would unilaterally exercise its market power and collude with other market participants.

58. Prior to the acquisition, NGC had ownership interests in two facilities - Mont Belvieu I and Gulf Coast Fractionators. The consent order required NGC to divest its interests in Mont Belvieu I and, with respect to the other facility, to give up its management role and refrain from participating in future decisions on pricing or capital expansion.

### 4. Convergence Mergers

59. Convergence mergers involve an incumbent electricity utility purchasing natural gas facilities to become, or enhance its role as, a provider of both electricity and natural gas in a particular area. These mergers can be either vertical, involving an acquisition of either an upstream or downstream participant in the production process, or horizontal, involving the acquisition of a competitor. In either case, there can be significant cause for concern that the merger will diminish the incentives of the parties to compete and encourage them to exercise market power in ways that they might not have been able to do absent the merger.

60. In the first challenge of a merger between an electric and a gas pipeline utility, the DOJ in 1998 filed a complaint and proposed consent decree challenging the \$6 billion combination of Enova Corporation ("Enova") and Pacific Enterprises ("Pacific"), allowing it to proceed after the divestiture of important assets to alleviate antitrust concerns. Enova is the parent company of the third largest electricity provider in California. Pacific is a natural gas utility and is virtually the sole provider of natural gas transportation services to plants in southern California that use natural gas to produce electricity, and the sole provider of natural gas storage services in California. California is currently restructuring its electricity industry to allow greater competition and consumer choice. As of March 1998 most electricity generated in California is bought and sold through a "pool" acting as a central, computerized bidding system matching supply and demand during every half hour period. State regulations require regulated utilities to buy and sell all their electricity through the pool during a four-year transition period. Because the price per unit of electricity for any given half hour is determined by the most expensive unit sold that half hour, with all sellers receiving that price regardless of their costs or their bids, a combined Enova-Pacific would have an incentive to limit gas supplies to competing gas-fired generators if it acquired Enova's low-cost generating assets, which would profit substantially from increases in the price of electricity during periods of high demand. The relevant market in this case is the provision of electricity in California during high demand periods; limited transmission capacity into California prevents consumers from turning to out-of-state sources. According to the proposed consent decree, Enova will sell its two largest low-cost electricity plants in order to eliminate the incentive to raise prices charged to utility customers in California.

61. Recently, the Commission issued a consent order settling charges that a proposed merger would combine the dominant provider of electric power in Virginia, Dominion Resources, Inc., with the primary

distributor of natural gas in southeastern Virginia., Consolidated Natural Gas Company, through its ownership of Virginia Natural Gas (“VNG”).<sup>15</sup> The complaint also alleges that entry into the electric power generation market in southeastern Virginia by companies unaffiliated with Dominion may be deterred because of Dominion’s control over VNG. Dominion could exercise unilateral market power to raise the cost of entry and production or otherwise gain a competitive advantage that would increase the likelihood that consumers would pay higher prices for electric energy. The Commission alleged that the market for the delivery of natural gas in the geographic market is characterized by high entry barriers and that extension of other natural gas companies’ existing pipelines to southeastern Virginia would be costly and time-consuming, and extremely difficult in light of the need for an entrant to acquire new rights of way. In addition, nearby pipelines lack sufficient excess capacity to support new electricity generators in southeastern Virginia. VNG, however, had ample excess capacity for serving prospective entrants into electricity generation. Because VNG was uniquely situated to serve new generation, which would compete with Dominion in the wholesale electricity markets, the Commission was concerned that Dominion’s acquisition of VNG would inhibit new entry into electricity generation. The order requires the divestiture of VNG to alleviate these alleged anticompetitive effects. The consent agreement also includes the issuance of an Order to Hold Separate to ensure that VNG remains a viable, independent competitor pending its divestiture.

#### *5. Related Areas*

62. In a related market, the Commission challenged a merger of competing firms involved in the collection and sale of well history and production data used by geologists and petroleum engineers to find additional gas and oil reserves and produce from them efficiently.<sup>16</sup> The consent order settling Commission charges required the acquiring firm was required to license a set of complete data to a Commission-approved buyer, which will be an independent competitor .

#### ***B. Non- merger enforcement***

63. In 1995 the DOJ filed a complaint and proposed consent decree to prohibit El Paso Natural Gas Co. -- a major gas pipeline owner and gatherer in the San Juan Basin (ranging from New Mexico to Colorado) -- from tying the sale of meters and meter installation services to the use of the company's gas gathering system. The Division alleged that El Paso was requiring producers to purchase El Paso's meter installation service as a condition for connecting natural gas wells to the El Paso system. The consent decree ends this tying arrangement and allows producers to seek alternative contractors, potentially lowering the cost of natural gas production.<sup>17</sup>

**ATTACHMENT****Key Features of the Demand for Gas**

64. The primary use of gas in the U.S. economy is for industrial purposes, with almost half of the gas consumed in the U.S. by industrial consumers. Residential uses account for almost a quarter of the total while commercial and electric utility uses each are about 15%. Electric generation is, however, the fastest growing sector of gas consumers; the amount of gas used for electric generation by electric utilities and non-utility generators is expected to triple by 2020. Many industrial consumers use alternate fuels, typically residual or distillate fuel oil, while residential consumers traditionally cannot. Fuel switching capability in the industrial sector enhances demand elasticity and disciplines gas and transportation prices.

**Key Features of the Supply of Gas: Market Structure**

65. The market for gas as a commodity is highly competitive. There are thousands of producers, independent marketers, pipeline affiliates, local distribution companies (LDCs), and end users who compete to buy and sell gas at the wellhead as well as at market centers located across the country. Commodity sales are increasingly short-term in nature, with gas changing hands numerous times between the wellhead and the burnertip.

66. Natural gas wellhead production is concentrated in Texas and Louisiana and offshore in the Gulf of Mexico, the South-Central states, and the Rocky Mountain states. Over 300,000 wells were producing gas in 1998. While a few large producers dominate the market, primarily the major oil companies, individual wells are owned by thousands of natural gas producers, large and small. A substantial amount of natural gas is also imported from Canada to the California, Chicago, and Northeast markets. The bulk of natural gas consumption is concentrated in the Northeast, the Southeast, California, and the Great Lakes region. Over 90 interstate open access pipelines form a nationwide grid. With the exception of offshore and field gathering, the major oil and gas producers generally do not have significant ownership of the gas pipeline network.

67. The transmission market is becoming more competitive. Many consumers have choices that they did not have a decade ago. Pipeline expansion has given many consumers access to more than one pipeline and an active secondary market has provided alternatives to single-pipeline consumers as well. Under the capacity release program, a pipeline's firm customers have become its competitors by releasing and selling unneeded capacity to others.

68. Distribution is performed by several hundred LDCs serving all 50 states. In recent years, the retail natural gas sales market has started to become more competitive as various states have initiated individual retail unbundling programs to introduce more choice to retail consumers. As of June 1999, eleven states have active unbundling programs or are in the implementation phase, nine states and the District of Columbia have pilot programs or partial unbundling programs (with one state scheduled to begin its pilot program in November 1999), eleven states are considering action on unbundling plans, and eighteen states have taken no action.<sup>18</sup> Consumer acceptance of these programs is mixed. In Nebraska, 97% of eligible residential consumers have elected to choose their own supplier, while in other states participation of eligible consumers is 2% or less.<sup>19</sup>

69. Retail marketers have begun to compete with LDCs to serve end users through the existing transmission/distribution network. Unlike pipelines or LDCs, marketers typically have no facilities of their

own, but contract with pipelines for transportation service. Marketers often hold a portfolio of gas supplies from a variety of sources, including direct purchases from producers. Marketers are then able to offer a bundled sale and transportation of gas to end users. Marketers may be affiliated with pipelines or LDCs, but can be independent as well.

70. The major firms in the natural gas industry are privately owned. Natural gas producers, interstate pipelines and many LDCs are for-profit, private companies. However, many LDCs, especially those serving small communities, are municipal government enterprises. The natural gas industry as a whole is now in the midst of a fundamental restructuring of commercial arrangements. Many firms are merging horizontally, leaving fewer market participants in all sectors of the gas industry: production, transmission, distribution, and marketing. Following the trends towards bigger companies and towards convergence of the natural gas and electric markets, electric companies are buying gas companies as well as merging with other electric companies. There has also been significant merger activity where electric utilities merge with other electric utilities, and natural gas pipelines merge with other natural gas pipelines.

71. The development of a competitive market for wholesale electric power has increased demand for natural gas. Over 127,000 megawatts of new generation capacity has been proposed to be built within the next five years, most of which is expected to be fueled by natural gas. Several electric generation firms have acquired natural gas pipelines and plan to use these assets to support their planned generation projects.

### **Key Features of the Regulatory Regime**

72. Federal regulation of interstate pipelines stems from the commerce clause of the United States Constitution which provides for federal, not state, regulation of interstate commerce (i.e., commerce that crosses state lines). Those aspects of the natural gas industry that operate only within state borders, such as distribution, are within each state's jurisdiction.

73. **Production** regulation occurs at the state level for non-Federal properties. States typically regulate drilling operations, field production levels, and production-related gas processing. Production is not subject to price regulation. Production from Federally-owned land, including the Outer Continental Shelf, is regulated by the Department of the Interior's Mineral Management Service. (See Figure 2 for a map of significant U.S. producing regions.)

74. **Gathering** (transportation from the wellhead to downstream processing) is also state regulated, although few states actively regulate gathering rates. Rates for gathering in Federal offshore waters is subject to neither Federal or state regulation, but access under Federal offshore waters must be provided on a non-discriminatory basis pursuant to the Outer Continental Shelf Lands Act.

75. **Intrastate transmission** (transportation of gas produced and consumed within a single state) is primarily subject to state-level regulation. Most intrastate transportation occurs within Texas and Louisiana. However, where intrastate transmission is a link in interstate commerce transporting natural gas that ultimately leaves the state, rates and services are subject to FERC control pursuant to regulations promulgated by the FERC to implement the Natural Gas Policy Act of 1978. (See Figure 3 for a schematic of interstate and international natural gas flows.)

76. **Interstate transportation and storage** is regulated by the FERC, both in terms of rates, construction, service availability and quality. Import and export authority is controlled by the Department of Energy, while the FERC has jurisdiction over the siting and construction of border-crossing facilities.



77. *Interstate gas sales* and sales of natural gas at the wellhead are no longer regulated but are subject to the competitive forces of the marketplace. The Commission has jurisdiction over the sale for resale of natural gas in interstate commerce but chooses to exercise its jurisdiction with a light hand, imposing virtually no regulatory controls over price or service. Sales for resale are done under blanket marketer certificates. In Order No. 636, the Commission issued such blanket sales authority to everyone.

78. *Distribution* is regulated at the state level. States regulate the price of delivered gas by local distribution companies and the rates and services for unbundled local transportation. Third-party marketers serving local distribution load are generally not price regulated, but may be subject to service quality and reliability regulation. Retail marketers, those who sell unbundled natural gas directly to consumers, are regulated as to fair market practices, market entry and exit, and standards of conduct by state regulatory authorities.

### **Entry Regulation**

79. Market entry differs for the various segments of the natural gas industry. Market entry for producers is not regulated. Retail distribution is regulated by the individual states, which grant service franchises to LDCs. Thus, entry at the retail level is highly regulated by the states. Interstate transmission and storage is regulated by the Commission. The Commission does not prevent new entrants from competing with existing companies and in fact often encourages proposals that provide alternative services to customers served by another pipeline. While entry is not restricted by regulation per se, the high capital cost of constructing facilities to compete with an existing market participant affects entry.

80. New market entrants for interstate transmission and storage are required to obtain authorization from the Commission in order to construct and operate facilities. Minor construction can be done under automatic or blanket certificate authorization, if performed by existing pipeline companies. For larger scale construction, the Commission reviews each proposal, whether for a new pipeline or an addition to an existing pipeline, to ensure that the project is in the public interest. The Commission considers the environmental and rate impacts of the project and assesses the need for the project. In addition, the Commission regulates new service offerings and proposals to terminate ("abandon") service.

81. A new entrant can generally serve any class of customer. In bypass cases, where a new entrant proposes to serve customers of an existing interstate pipeline, the Commission does consider the impact of the bypass on the existing pipeline and its customers and balances that impact with the benefit of providing a new alternative supply to those customers.

### **Access Regulation**

82. Most interstate pipelines (including pipelines that import and export) are open access; they provide service on a non-discriminatory basis. Each pipeline develops its own terms and conditions of service based on its commercial interests but consistent with the regulatory goals of the Commission. The terms and conditions are detailed in each pipeline's tariff which it is required to file with the Commission and open for inspection. Pipelines that provide a type of service to one customer must be willing to provide the same service to similarly situated customers, pursuant to Commission policy as stated in Order Nos. 436, 636, and 497.<sup>20</sup>

83. Pipelines are generally not required to construct facilities in order to serve a customer. Pipelines utilize a variety of methods for allocating capacity depending on the type of capacity available. For capacity resulting from new construction, the pipelines often hold open seasons to receive bids for new

capacity. If existing firm capacity is available, the pipeline can allocate that capacity to shippers on a first come, first served basis. The pipeline can allocate any capacity not used during a given period to shippers willing to purchase interruptible service, even if the pipeline capacity is fully contracted on a firm basis. When capacity is limited (i.e., at peak times), the pipeline will provide service to firm shippers first, curtailing interruptible service if necessary. If operational constraints restrict capacity to the extent that all firm service cannot be provided, the pipeline will prorate service to firm shippers. Pipelines are required to post all available capacity on their electronic bulletin boards or Internet web sites. Uncontracted firm capacity is allocated to the highest bidder up to the maximum allowable rate.

84. Shippers may also release some or all of their firm transportation capacity to others under the capacity release regulations. Although these releases are re-contracted with the pipeline as a commercial party to the new contract, releasing shippers may choose the replacement shipper, subject to competitive bidding for releases longer than one month in duration. In the event competitive bids are submitted, a pre-arranged replacement shipper has the right to match the competitive bid and retain the capacity. Bidding requirements do not apply to releases of one month or less; however, such short-term releases are subject to prohibitions against continuation of the release beyond the initial term.

### **Price Regulation**

85. Pipelines set a maximum rate as well as a minimum rate for each service based on the cost of providing that service. These rates are publicly available. The cost of service includes operating costs, return on and of capital, and taxes. These costs are based on a representative past period and applied to a future period. If the pipeline provides the projected level of service, it will recover its costs, including a reasonable return. Pipelines are allowed to discount rates to select customers in order to attract or retain business. This price discrimination is constrained, however, by the Commission's policy of requiring rates and services to be offered to any similarly situated customers. Thus, transmission rates can rise and fall between the rate ceilings and floors. The ability of a pipeline to recover its costs depends on its success in the marketplace. A pipeline can recover less than or more than its cost of service depending on the total amount of service it provides. Once rates are set, pipelines have an incentive to be efficient and lower costs.

86. The Commission mandates that pipeline rates for firm service be determined using a two-part, straight fixed-variable (SFV) method. Under the SFV method, all the fixed costs of the service are included in a monthly reservation charge while all the variable costs are included in the commodity rate. The Commission has allowed a few pipelines to deviate from SFV rates for firm service as part of negotiated settlements between the pipeline and its customers, in customized transactions negotiated with individual shippers, and for interruptible service which is priced on a volumetric basis.

87. Pipeline rates can be mileage-based, zone-based, or postage stamp (one rate for the entire system). All open access interstate pipelines provide firm transportation as well as interruptible. Many pipelines provide a growing array of services including storage, no-notice transportation, and park and loan services. As the market for transmission services becomes more competitive, pipelines are creating new, specialized services to attract new customers and compete with rival providers.

88. In certain circumstances, the Commission allows market-based rates and negotiated rates. Market-based rates are authorized when the pipeline can show that the market is competitive. The Commission applies a classic market power analysis to assess the applicant's market concentration and market share. The Commission determines whether consumers in that market have sufficient good choices as alternatives to the proposed service. Market-based rates have been employed mainly for storage services.

89. The Commission also allows negotiated/recourse rates. Pipelines can negotiate individual rates with a specific customer that vary from its authorized tariff rates as long as the pipeline has a viable recourse service, at regulated cost-based rates, available to all customers as an alternative. Negotiated rates can use a rate design other than SFV and can contain other provisions such as minimum volumes.

90. Pipeline tariffs contain numerous terms and conditions to ensure quality of service. Pipelines also have the ability to issue operational flow orders to restrict service at times when the integrity of the system is in jeopardy. Pipelines can impose penalties when customers fail to abide by the tariff requirements.

### **Non-Commercial Service Obligations**

91. Service to end-use customers is regulated by the states and not on the Federal level. Each state regulates its LDCs' service to end users in a different way. Most states give franchises to separate LDCs. Many states include "obligation to serve" requirements as part of their franchise regulation. This universal service objective requires LDCs to serve unprofitable customers to some extent. Because of the independent nature of the 50 states, the nature and implementation of the service obligation varies greatly from state to state and is undergoing change as states craft individual retail unbundling programs. With retail unbundling, some states now permit competing firms to serve those markets.

### **Separation and Unbundling**

92. The Commission requires an operational separation of function between an interstate pipeline and its marketing affiliate to prevent any preferential treatment of the affiliate by the pipeline. The Commission has established standards of conduct that pipelines must follow to separate the operations of pipelines and their affiliates through means such as prohibiting shared personnel and fair and equal treatment of non-affiliates.

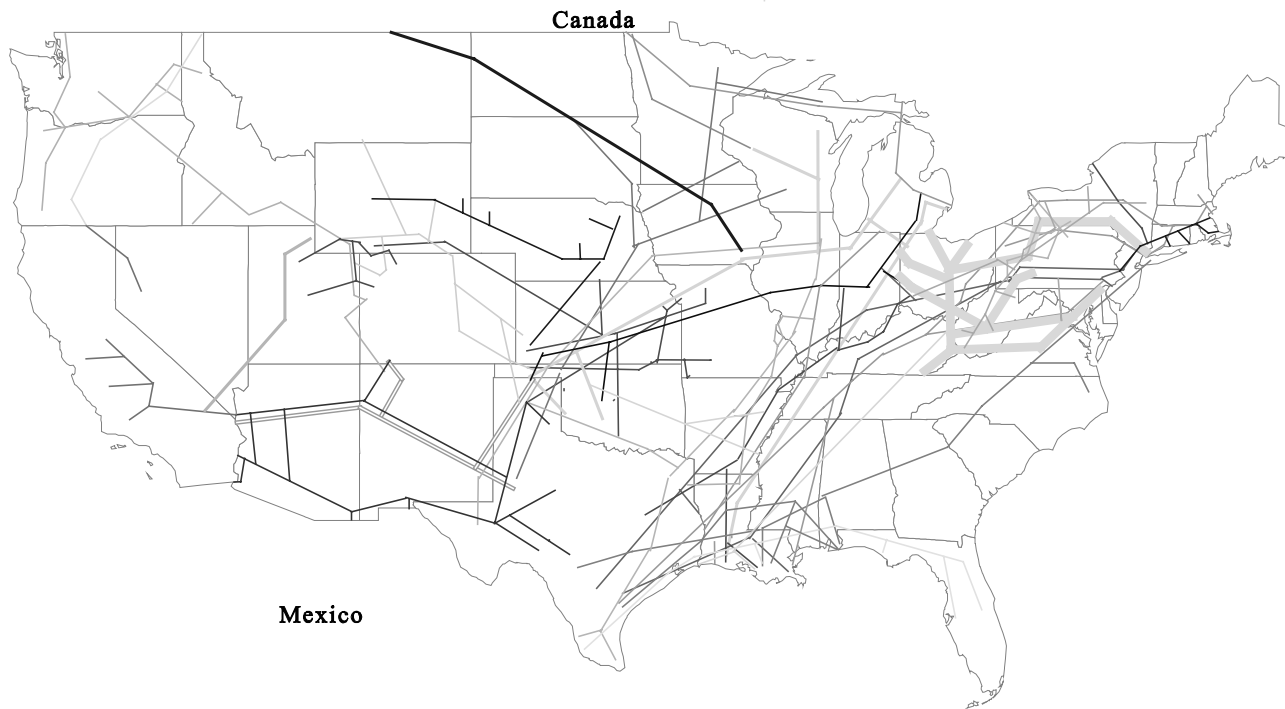
### **Trade and Investment Issues**

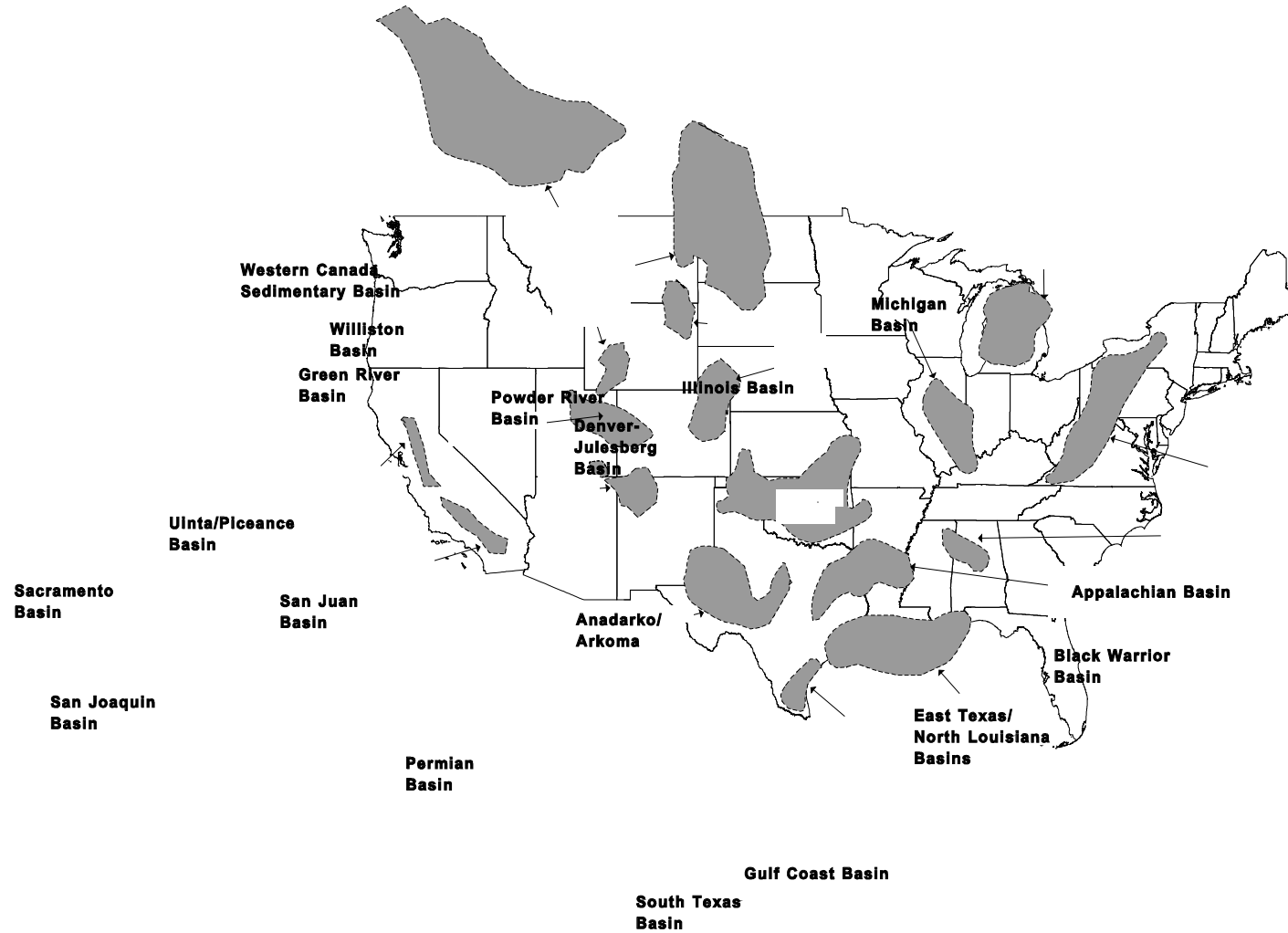
93. Natural gas is imported from and exported to Canada; smaller volumes are imported from and exported to Mexico. Canadian imports totaled 3.26 Tcf in the year ending October 31, 1999, which is nearly a five-fold increase since 1983. Canadian imports now represent close to 15% of the U.S. market. Only about a quarter of those imports are sold under long-term contracts. The Department of Energy has jurisdiction over, and regulates in a light-handed manner, the import and export services, which it exercises through the use of blanket import/export authority. Imports and exports are not price-regulated, but rather are priced at prevailing competitive market rates. The FERC authorizes construction of the border facilities. A number of pipelines located across the international borders of the U.S. import and export gas.

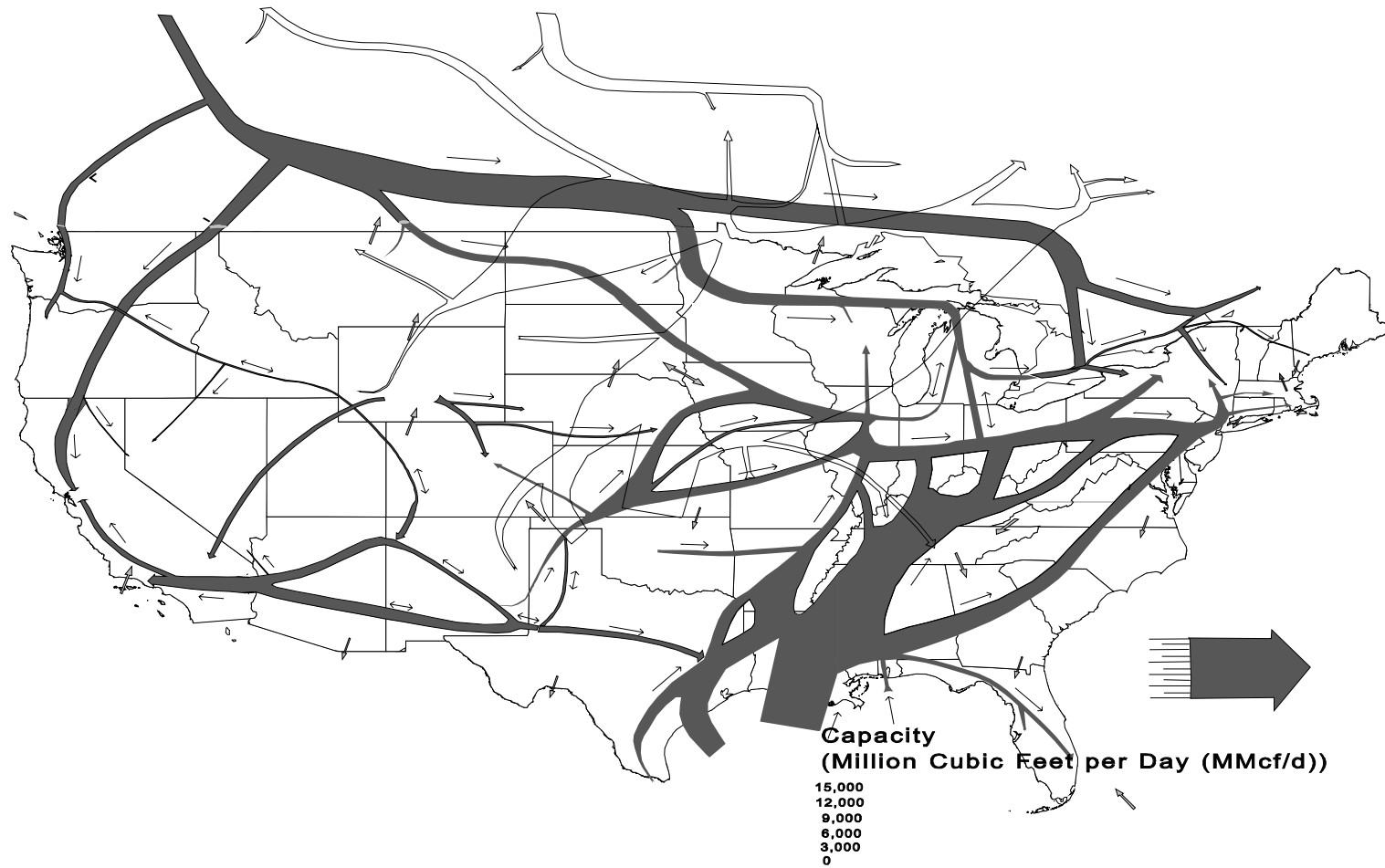
94. Liquefied natural gas (LNG) is also imported, primarily from Algeria, with spot purchases from Australia and the United Arab Emirates. LNG is exported to Japan with a small amount exported to Mexico. Firms that import or export gas or LNG are allowed to be integrated into gas transmission. Firms typically are independent companies affiliated with interstate pipelines.

**Miscellaneous Issues**

95. Environmental concerns play an important role in policy decisions regarding the construction of new pipeline facilities. The National Environmental Policy Act (NEPA) ensures that environmental concerns related to construction are included in the decision-making process. An environmental report is prepared for each construction project. That report assesses the impact that the project will have on the affected area, including such impacts as endangered species, agriculture, land use, water resources, and cultural resources. The report also examines any alternatives to the proposed project. The Commission examines the report and considers it along with the applicant's proposal and all comments filed with the Commission when making its decision. Once a project is authorized by the Commission, environmental concerns continue to play a role in the implementation phase. The Commission coordinates with the permitting requirements of other Federal agencies and state and local agencies.







= Less than 100 MMcf/d Capacity

## NOTES

- 1 The discussion of topics one, two, and three, and the Attachments, were prepared by the staff of the United States Federal Energy Regulatory Commission. The discussion of topic four was prepared jointly by the staffs of the United States Federal Trade Commission and the Antitrust Division of the United States Department of Justice.
- 2 A map showing only the largest interstate natural gas transmission pipelines is attached as Figure 1.
- 3 While the NGA empowers the United States Federal government to regulate the importation and exportation of natural gas, these authorities and responsibilities have been divided between the FERC, which remains responsible for siting of border-crossing facilities, and the Department of Energy, which is responsible for regulating the actual importation and exportation of natural gas.
- 4 *Phillips Petroleum Co. v. Wisconsin*, 347 U.S. 672 (1954)(mandating Commission regulation of the gas commodity).
- 5 For example, Department of Energy, Energy Information Administration (EIA) data on manufacturing consumption of energy in 1991, estimated that of the 5,345 billion cubic feet of natural gas consumed by industrial customers, over 1,860 billion cubic feet was consumed by industrial customers with fuel switching capability, with the bulk of this demand able to be met through consumption of distillate and residual fuel oil and "coal, coke and breeze". For the actual EIA data see: <ftp://ftp.eia.doe.gov/pub/consumption/industry/ta54.pdf>. (This does not include natural gas consumption for electrical generation, a portion of which is also fuel switchable between distillate, residual fuel oil and coal.)
- 6 The United States Energy Information Agency reports that as of June 1999, 11 states allow residential customers to choose among competing natural gas commodity suppliers, while 11 additional states have begun pilot retail choice programs. ([http://www.eia.doe.gov/oil\\_gas/natural\\_gas/restructure/state/us.html](http://www.eia.doe.gov/oil_gas/natural_gas/restructure/state/us.html).) The American Gas Association identified 23 states and the District of Columbia where residential pilot programs are underway or proposed, or where broader customer choice programs are being implemented. Issue Brief 1999-05, Nov.19, 1999.
- 7 *California v. FPC*, 369 U.S. 482 (1962).
- 8 The Federal Trade Commission has taken the lead role in merger enforcement in this sector.
- 9 See 16 C.F.R. § 802.3 and 61 Fed. Reg. 13678 (1996). The exemption includes associated exploration and production assets and gathering facilities that are dedicated to the particular reserves being purchased.
- 10 U.S. Department of Justice and Federal Trade Commission, Horizontal Merger Guidelines (April 2, 1992).
- 11 *FTC v. Questar Corp.*, No.2:95CV 1137S (D. Utah 1995) (transaction abandoned.)
- 12 *See also* El Paso Energy, FTC Docket No. C-3915, 5 Trade Reg. Rep. (CCH) ¶ 24,667 (January 6, 2000).



- 13 Shell Oil Co. and Tejas Energy, LLC., FTC Docket No. C-3843, 5 Trade Reg. Rep. (CCH) ¶ 24,510 (December 21, 1998).
- 14 NGC Corp., FTC Docket No. 3697, 5 Trade Reg. Rep. (CCH) ¶ 24,093 (December 12, 1996).
- 15 Dominion Resources, Inc., FTC Docket No. C-3901, 5 Trade Reg. Rep.(CCH) ¶ 24,668 (December 9, 1999).
- 16 SoftSearch Holdings, Inc., FTC File Docket No. C-3759, 5 Trade Reg. Rep.(CCH) ¶ 24,171 (July 28, 1997).
- 17 U.S. v. El Paso Natural Gas Co., 1995-2 Trade Cas. (CCH) ¶ 71,118 (January 12, 1995).
- 18 United States Department of Energy/Energy Information Administration, [http://www.eia.doe.gov/oil\\_gas/natural\\_gas/restructure/state/us.html](http://www.eia.doe.gov/oil_gas/natural_gas/restructure/state/us.html) (2/2/00) (New Mexico, New York, West Virginia, Georgia, Maryland, Massachusetts, New Jersey, Ohio, California, Colorado, Pennsylvania).
- 19 Id.
- 20 Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol, Order No. 436, 50 FR 42408 (Oct. 18, 1985), FERC Stats. & Regs. Regulations Preambles [1982-1985] ¶ 30,665 (Oct. 9, 1985). Pipeline Service Obligations and Revisions to Regulations Governing Self-Implementing Transportation Under Part 284 of the Commission's Regulations, Order No. 636, 57 FR 13267 (Apr. 16, 1992), FERC Stats. & Regs. Regulations Preambles [Jan. 1991-June 1996] ¶ 30,939 (Apr. 8, 1992). Inquiry into Alleged Anticompetitive Practices Related to Marketing Affiliates of Interstate Pipelines, Order No. 497, 53 FR 22139 (June 14, 1988), FERC Stats. & Regs. Regulations Preambles [1986-1990] ¶ 30,820 (June 1, 1988).